temperature monitoring, brought to perfection

EUROSCAN RX2-6 / TX2-6

Cabin and trailer recorder

USER MANUAL

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INTRODUCTION

This manual is a user guideline for the use of the EUROSCAN RX2-6/TX2-6 6 sensor temperature recorders. To avoid guarantee exclusion due to incorrect installation, it is essential to follow the instructions and recommendations in the installation manual.

EUROSCAN RX2-6 and EUROSCAN TX2-6 temperature recorders are developed and produced to conform to the applicable European and National guidelines, for the delivery of chilled and frozen transport goods in transport vehicles.

EUROSCAN RX2-6/TX2-6 can provide evidence of correct temperatures for every trip in the form of a delivery ticket, numerical or graphical print-out. All data is stored with a date/time stamp in a large flash memory. Data will not be lost if power supply is disconnected. The real time clock is powered by an internal back-up battery.

Both products are produced by Euroscan in the EU. Euroscan has a policy of continuous development and improvements. Therefore, *products, manuals and technical information are subject to change without prior notice*.

Data security

Although the Euroscan X2-6 recorder has be 0en specifically designed and tested for use in the harsh vehicle environment there are certain circumstances beyond our control, i.e. lightning strikes, high voltage peaks, theft, manipulation, etc., where data loss could occur. Because the temperature data might be crucial to providing evidence in the case of transport damages, we strongly advise you to take the following precautions:

- Print or download data to a PC on a **weekly** basis as a back-up.
- For a long-term storage of the data, we recommend to download the data into the Euroscan EuroLOG software via one of the communication options offered by Euroscan. In addition to the infrared connection, Euroscan offers a variety of communication options for automated data transfer from the recorder to the different Euroscan software options. For further information please contact the Euroscan Sales team or visit our website at www.euroscangroup.com.
- Check the correct functioning of the recorder frequently (minimum – together with the fridge service).
- Check the recording system every 12 months to see if the measurement is within the legal error limit. The annual test is obligatory, according to resp. EN 12830 or EN 13486.
- Do not weld without disconnecting the power from the Euroscan recorder or the vehicle.
- Do not take the power supply from a generator system without extra filter protection against high voltage peaks. Preferably, always take power direct from the vehicle or fridge battery.
- Follow the installation and user instructions.

To navigate through the menus and to select in the edit mode a parameter from a table, use the buttons as described below:

Blue	↑	Previous item of the menu
	<	In edit mode: previous item from the list
Yellow	↓	Next item of the menu
	>	In edit mode: next item from the list
Green	**edit**	Menu select, change to edit mode or one menu level down
	accept	In edit mode: accept input and go to next menu point
Red	**<-Menu**	One menu level up
	<-Cncl	In edit mode: cancel input and display the non-changed value. Press 2 seconds for rejecting input and return to previous menu.

When entering free programmable text like names the button functions are as follows:

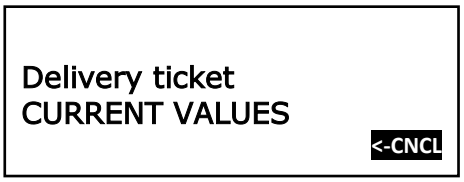
Blue	↑	Next character from the list
Yellow	↓	Previous character from the list
Green	**<**	One character to the left
Red	**>**	One character to the right
Blue + Yellow	**<-cncl**	Cancel input and display the non-changed value. Press for 2 seconds to reject the input and go back to the previous menu.
Green + Red	**accept**	Accept input and go to next menu point.

EUROSCAN RX2-6/TX2-6 has four different user menus which are accessible via the keyboard without PIN code:

- **Print menu**
- **Alarm menu**
- **User settings menu**
- **Status menu**

Menu 1 Print menu

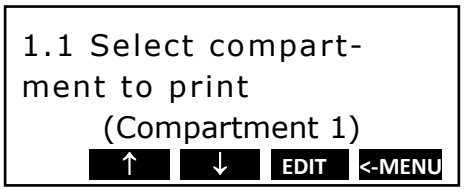
Press the **blue** button. The last selected print choice will be displayed. Printing now starts after 2 seconds. Repeatedly pressing the blue button will scroll between the available print options: delivery ticket, journey ticket graphical, journey ticket, numerical, and historical ticket.



By pressing the blue button for more than 2 seconds the following sub-menus are reached:

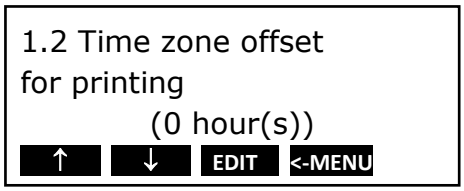
1.1 Select compartment to print

By pressing the **green** button you confirm that you wish to change the settings. The chosen compartment can be selected by pressing < > and your choice can be confirmed with ACCEPT



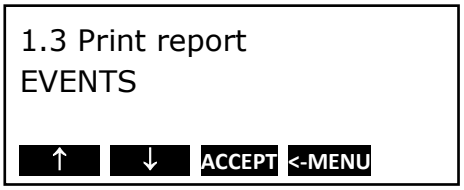
1.2 Time zone offset for printing

This option is intended to have the local time printed on your ticket. In case “0 hour(s)” is selected, the recorder time will be printed.



1.3 Print event report

When pressing the **green** button ACCEPT printing of the event report will start.

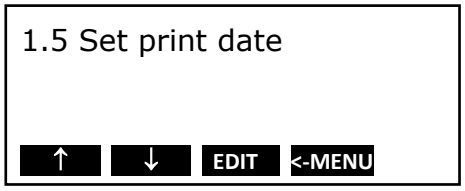


1.4 Print parameter report

By pressing the **green** button/ ACCEPT, the parameter report will be printed after entering the correct pin code (1-2-1-2).

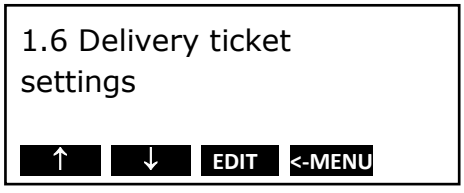
1.5 Set print date

With EDIT you can select a historical date for printing. After you pushed ACCEPT you can select the required report with the blue button. Printing starts after a delay of 2 seconds.



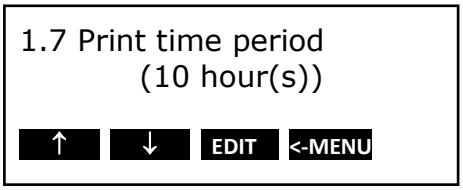
1.6 Delivery ticket settings

With EDIT you can set the desired information printed on the delivery ticket. You can select “actual value”, “actual + average” or “actual, average and min-max values”. By pressing the green button you ACCEPT your choice.



1.7 Print time period

With this option you define the total print period.



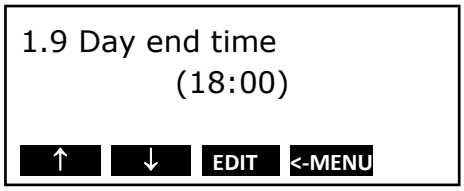
1.8 Day start time

This option defines the time which is taken as start time for the printout (printout is printed backwards until this time).

1.9 Day end time

This option defines the time from which the printout is printed backwards (please note that a printout is always printed backwards, i.e. from the day end time till start time).

Examples:



- You want to make a printout for a certain date in the past for a time period which exceeds the day start time. Please change day start time to 0:00 h and enter the desired time period.
- You want to make a printout for 2 days. Change time period to 2 days, day start time to 0:00 h - day end time to 0:00 h.

- By pressing the **YELLOW** key for more than 3 seconds you define a starting point for a dedicated journey. The display will show this. Printing will start from the defined journey start.

Menu 2 Alarm settings

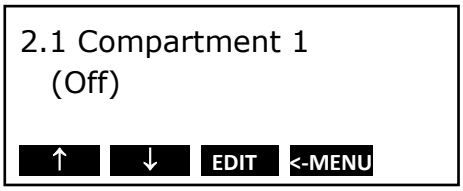
Up to four different alarm types can be allocated to up to four different compartments. The various alarms (and compartments) are only available if the supervisor has preset and configured them in the parameter menu.

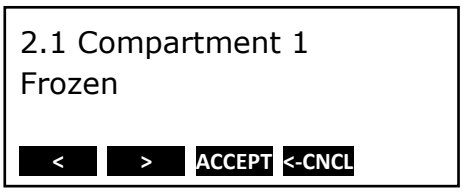
Digital input 1 and 2: When not enabled as digitals, they are used for switching on and off the alarm compartments 1 and 2. The driver is able to select either compartment, followed by: OFF / last alarm setting

Press the **YELLOW** button to access the alarm menu.

2.1 Compartment 1

When pressing the yellow button a second time you reach the options which can be changed. With ↑ ↓ you toggle between the compartments available. The value given in brackets shows the actual setting. By pressing **EDIT** you can change alarms for the selected compartment.
With < > you select the desired alarm type (including alarm off). By pressing **ACCEPT** the new setting will be activated. The display now changes to the next menu entry.





2.2 Compartment 2 (same as Compartment 1)

2.3 Compartment 3 (same as Compartment 1)

2.4 Compartment 4 (same as Compartment 1)

2.5 Digital input 1

The Euroscan X2-6 recorders are provided with 4 digital inputs that can be used for invoking alarms from door switches and refrigerators. An alarm condition is reached if an input remains in an alarm condition for a certain period of time. This preset (delay time) can be up to 60 minutes.

2.6 Digital input 2 (same as Digital input 1)

2.7 Digital input 3 (same as Digital input 1)

2.8 Digital input 4 (same as Digital input 1)

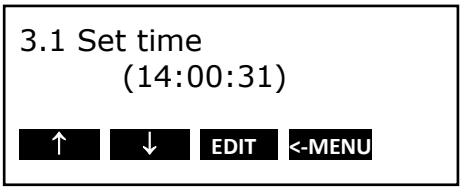
2.9 Alarm output test

Pressing the green key **TEST** will initiate the external alarm for 10 seconds. This may be a light or buzzer connected to the recorder.

Menu 3 User settings menu

With the user settings, several adjustments can be made to offer the user a maximum of user convenience. By pressing the green button the user setting menu will be activated.

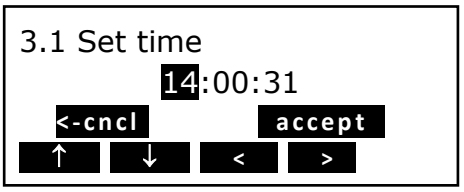
Toggle with ↑ ↓ between the available menu options (3.1 to 3.2, 3.3, …). Between brackets (..) the actual setting is displayed.



With **EDIT** you enter the edit mode. In this menu you can change the settings at your convenience. The supervisor PINCODE, factory set at, 1111, is required. The following pictures show the display in the edit mode.

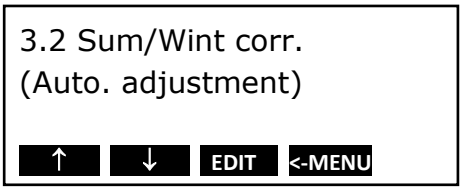
3.1 Set time

Select hours, minutes, and seconds with < > and adjust with ↑ ↓. Confirm the setting with ACCEPT (green-red).



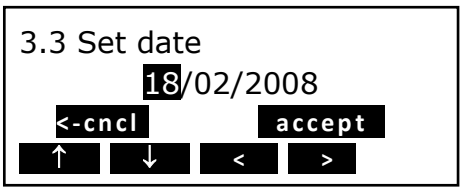
3.2 Summer/Winter time correction

If you do not want an automatic adjustment of summer and winter time you could define this here. The supervisor PINCODE, is required.



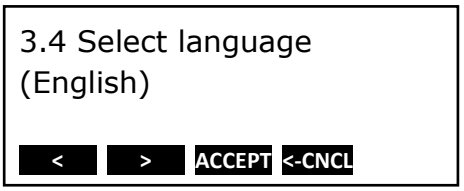
3.3 Set date

Select date, month, and year with < > and adjust with < > . Confirm setting with **ACCEPT** (green-red simultaneously). The supervisor PINCODE is required.



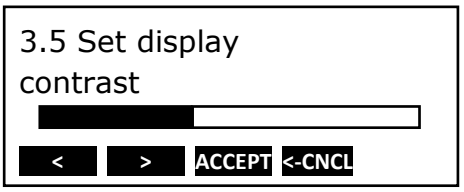
3.4 Select language

Select the desired language with < > and confirm with **ACCEPT**.



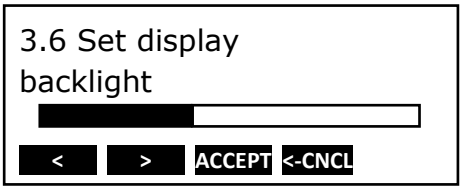
3.5 Set display contrast

Set the desired display contrast < > and confirm with **ACCEPT**.



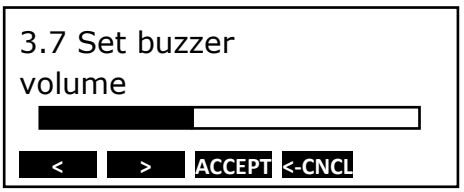
3.6 Set display backlight

Set the intensity of the backlight to your convenience < > and confirm with **ACCEPT**. The light switches on when you press any button and switches off after 30 seconds.



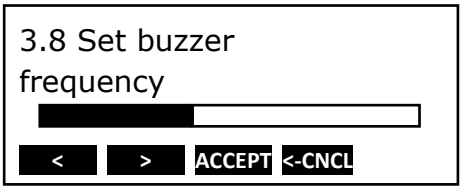
3.7 Set buzzer volume

Change the buzzer volume with < > and confirm with ACCEPT. This only applies to key presses, and not to alarms.



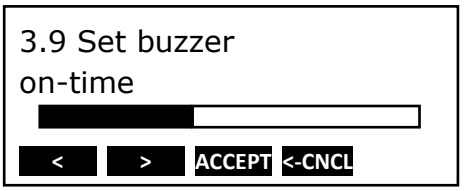
3.8 Set buzzer frequency

Change the buzzer frequency with < > and confirm with ACCEPT. This only applies to key presses, and not to alarms.



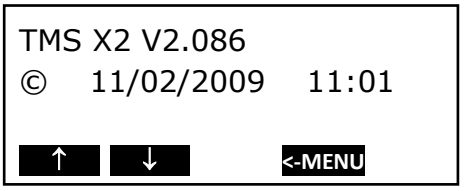
3.9 Set buzzer on-time

Change the buzzer on-time with < > and confirm with ACCEPT. This only applies to key presses, and not to alarms.



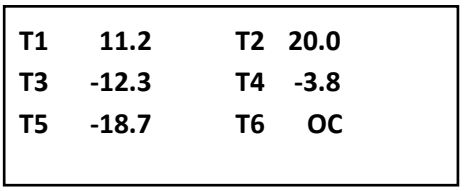
3.x TMS X2 V2.08

Displays the actual firmware version of the recorder.

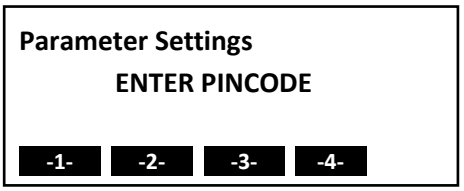


Menu 4 Status menu

Press red button. The display mode will change between full menu information, or only showing actual temperatures enlarged and reading to one decimal point. Used when carrying out verification procedure.
In order to return to the main display please press any button.



4.x Parameter menu



The **EUROSCAN TX2-6/RX2-6** recorder has been designed to enable a multiple number of desired applications for individual customers. By using the corresponding parameter settings you can adjust the recorder functionality to the required needs. This chapter gives an overview and structure of the various parameters available.
To enter the parameter menu press the green button for 2 seconds. The display will show: “ENTER PINCODE”.
The default setting of the pin code is 1111, but can be adjusted by the supervisor at any time (ask your distributor).

After entering the correct pin code you have access to the parameter menu and the first menu level is displayed. Select the desired item with [↑], [↓] and press [EDIT] to enter one of the following options:

5 Temperature inputs settings
6 Digital inputs settings
7 Compartment settings
8 Alarm settings
9 Printer settings
10 General settings
11 Communication settings

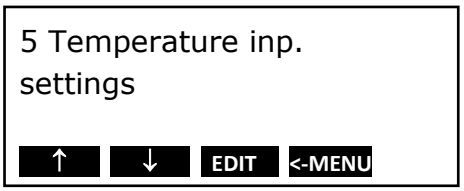
A 4 digit PIN code has to be entered in order to enter menus 5 to 11.

Menu 5 Temperature input settings

Inputs for temperature measurements can be switched on/off and assigned a name, depending on the sensor position. Default, input 1 is preset as ‘Return air’ and input 2 as ‘Rear’.

5.1 T1 input > On/Off

If „on“ input 1 will be measured, displayed and stored into memory. Printing of input 1 is assigned in the compartment setting (menu item 7). When ‘Off’, go to item 5.2.



5.1.1 Type > Temperature

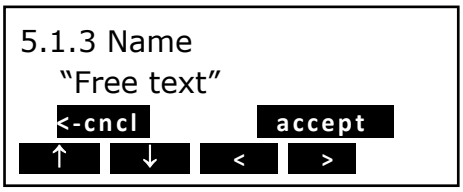
You can select a sensor type (temperature or relative humidity)
Temperature input
Relative Humidity input (0..1 V)
Universal input (0..2,5 V)
Current sensor input (4..20 mA)
External sensor (see Doc. No. EN-209-4:UD External analogue and digital sensors protocol)

5.1.2 Name (sensor) > Return air

You can select a sensor name from the table or enter a **free text** (free text is not translated when the language is changed !!!)

5.1.3 Name (free text) > free text

Enter a text as desired via the four buttons



5.2 T2 input > on/off, menu structure as 5.1

5.3 T3 input > on/off, menu structure as 5.1

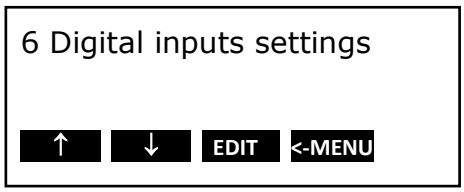
5.4 T4 input > on/off, menu structure as 5.1

5.5 T5 input > on/off, menu structure as 5.1

5.6 T6 input > on/off, menu structure as 5.1

Menu 6 Digital inputs settings

4 inputs for status recording, all inputs can be switched on/off, assigned with a name and inverted polarity. Some names are available as a factory setting and can be selected from a list.
In the operating mode you can see on the display which inputs are activated. A small rectangle indicates that the input is active and the status “low”. When the status is “high”, depending on the assigned function, a corresponding symbol is displayed:-



▯ = Defrost inactive

☂ = Defrost active

▯ = Refrigeration inactive

∗ = Refrigeration active

| = Back door / Side door closed

= Back door / Side door open

□ = Battery back-up active/low charge – the recorder is working on normal power

■ = Battery back-up active/high charge – the recorder is working on backup battery

□ = Free text active

■ = Free text inactive

6.1 Digital input 1 > On/Off

If ”on“, every input status change on D1 will be displayed and recorded with a date/time stamp.

6.1.1 Name > Refrigeration

Select a sensor name from the list or enter a free text (free text is not translated when changing the language).

6.1.3 Active > high/low

Input polarity switch. Switch function if “high”: contact closed = input active. If “low”: contact open = input active (applicable for door contacts, active = open)

6.1.4 Alarm > On/Off

ON in order to activate alarm for this input. In this case you get the following options:

6.1.4.1 Delay time > 10 minute(s)

Alarm delay time given in minutes

6.1.4.3 Store position when alarm active > Yes/No

Here, the GPS position at the moment of the ALARM can be stored.

6.1.5 Store position when input active/inactive or both

> NO

> WHEN INPUT ACTIVE
> WHEN INPUT INACTIVE
> WHEN ACTIVE + INACTIVE

6.2 Digital input 2 > On/Off, menu structure as 6.1

6.3 Digital input 3 > On/Off, menu structure as 6.1

6.4 Digital input 4 > On/Off, menu structure as 6.1

Menu 7 Compartment settings

In this menu you have to configure the print and alarm functions for up to maximum 4 compartments. Per compartment, one name can be assigned like FRONT, BACK, SIDE. The user is able to print a ticket or activate an alarm per compartment.

7.1 Compartment 1 >On/Off

Activates or deactivates compartment 1

7.1.1 Compartment name > (compartment 1)

The compartment name has to be set as a free text and will not be translated when changing the language

7.1.2 Print T1 > Yes/No

Choose whether T1 should be printed or not

7.1.3 Alarm on T1 > Yes/No

Choose whether T1 can invoke an alarm or not

7.1.3.1 Store position when alarm active > Yes/No

The GPS position of the vehicle can be stored in case the alarm changes from Inactive to active.

7.1.3.2 Store position when alarm inactive > Yes/No

The GPS position of the vehicle can be stored in case the alarm changes from active to Inactive.

7.1.4 Print T2 > Yes/No

Same as T1

7.1.5 Alarm on T2 > Yes/No

Same as T1

7.1.5.1 *Store position when alarm T2 active* > Yes/No

Same as T1

7.1.5.2 Store position when alarm T2 inactive > Yes/No

Same as T1

7.1.6 Print T3 > Yes/No

Same as T1

7.1.7 Alarm on T3 > Yes/No

Same as T1

7.1.7.1 Store position when alarm T3 active > Yes/No

Same as T1

7.1.7.2 Store position when alarm T3 inactive > Yes/No

Same as T1

7.1.8 Print T4 **> Yes/No**
Same as T1

7.1.9 Alarm on T4 **> Yes/No**
Same as T1

7.1.9.1 Store position when alarm T4 active ***> Yes/No***
Same as T1

7.1.9.2 Store position when alarm T4 inactive ***> Yes/No***
Same as T1

7.1.10 Print T5 **> Yes/No**
Same as T1

7.1.11 Alarm on T5 **> Yes/No**
Same as T1

7.1.11.1 Store position when alarm T5 active ***> Yes/No***
Same as T1

7.1.11.2 Store position when alarm T5 inactive ***> Yes/No***
Same as T1

7.1.12 Print T6 **> Yes/No**
Same as T1

7.1.13 Alarm on T6 **> Yes/No**
Same as T1

7.1.13.1 Store position when alarm T6 active **> Yes/No**
Same as T1

7.1.13.2 Store position when alarm T6 inactive ***> Yes/No***
Same as T1

7.1.14 Store position on COMPARTMENT ALARM
>NO
>WHEN SWITCHED ON
>WHEN SWITCHED OFF
>WHEN SWITCHED ON + OFF

7.1.15 Print D1 **> On/Off**

7.1.16 Print D2 **> On/Off**

7.1.17 Print D3 **> On/Off**

7.1.18 Print D4 **> On/Off**

7.2 Compartment 2, 3 and 4 > On/Off, menu structure as menu 7.1

Menu 8 Alarm settings

There are 4 alarm groups – each with a name to assign, upper and lower temperature limit and a delay time. Each enabled alarm type can be activated by the user for any compartment, although per compartment only one alarm group can be set at the same time.

8.1 Alarm Group 1 > On/Off

8.1.1 Name >Frozen

You can select a pre-set alarm group from a list or enter a free text (free text is not translated when changing the language).

8.1.3 Temperature upper limit > +50 °C

8.1.4 Temperature lower limit > -30 °C

VALID WHEN INPUT IS A TEMPERATURE INPUT (SEE 5.1.1)

8.1.5 % upper limit > 0..100%

8.1.6 % lower limit > 0..100%

VALID WHEN INPUT IS A RELATIVE HUMIDITY, UNIVERSAL OR CURRENT SENSOR (SEE 5.1.1)

8.1.7 Initial Delay time > 120 min.

This is the time before an alarm condition will be considered as a 'real alarm' (intended to ignore alarms, e.g. in case the refrigerator has started and the compartments have not yet reached their set point temperature).

8.1.8 Delay time > 60 min.

This is the time that an alarm condition has to be 'true', before an alarm will be evoked.

8.2 Alarm Group 2 > On/Off, menu structure as menu 8.1

8.3 Alarm Group 3 > On/Off, menu structure as menu 8.1

8.4 Alarm Group 4 > On/Off, menu structure as menu 8.1

8.5 ALARM BEHIND PIN

Option to make the alarm settings accessible by entering a PIN code.

8.6 OUTPUT FUNCTION

Define the function of the alarm output (AO) on CON1: alarm output or remote on/off.
By choosing "remote on/off", the output can remotely be handled over a GPRS connection.

8.7 alarm repetitions

Defines the number of times an alarm output (buzzer and alarm output) should be repeated after it has been acknowledged by the yellow button or timed out due to the ‘Alarm output time span’. Selecting ‘0’ will disable alarm repetition and the maximum number is 10.

8.7.1 Interval of alarm repetitions

Defines the time in minutes before repeating an alarm, what has been acknowledged or has timed out. Minimum interval time is 1 and maximum is 60 minutes.

8.7.2 Alarm output time span

Often the alarm output is used to control an external acoustic alarm. To avoid noise pollution and to comply with legal requirements the alarm output time can be controlled by this parameter:

- ‘0’= Alarm output will stay active until the alarm is acknowledged by the yellow button or if the alarm conditions do no longer apply.
- ‘1-240’ minutes; Alarm output will stay active until the alarm is acknowledged by the yellow button or if the programmed time has been reached.

Menu 9 Printer settings

Following settings enable you to configure the printer functions as desired:

9.1 Graph upper limit > +50 °C

Upper limit for graphical printout

9.2 Graph lower limit > -30 °C

Lower limit for graphical printout

Note: If the total temperature range between upper and lower limit can be divided by 9 you achieve an optimal result for the printout → → → →

9.3 Graph mm per hour > 10 mm

A graphical printout consumes a lot of paper. This parameter enables you to set the scaling of the printout (mm of paper per hour). Set a value to avoid wasting paper.

9.4 User menu > Yes/No

If set to 'Yes', the following 4 parameters will be available for the user in the print menu (see chapter 3.1 for detailed description).

9.5 Delivery ticket setting

Print [Actual only], [Actual + average] or [Actual + average + min/max] temperature.

9.6 Print time period > 10 hours

Set time period (explained in chapter 1.6)

9.7 Day start time > 06:00

Set day start time for printing (explained in chapter 1.7)

9.8 Day end time > 18:00

Set day end time (explained in chapter 1.8)

Menu 10 General settings

General settings for the unit can be entered:

10.1 Temperature unit > °C/°F

10.2 Date format > dd/mm/yyyy or mm/dd/yyyy

10.4 Sample rate > minute(s)

Interval time in minutes (1, 2, 3,..,15, 20, 25, 30,.., 60 min.) for storing a temperature measurement into memory.

10.5 Vehicle ID > ABCDEF

16 characters are available for assigning vehicle identification. It is necessary to enter an identification like registration number or chassis number in the case of a trailer. The vehicle ID will be shown on every printout in the header together with the serial number and header text.

10.6 Header text > Abcdef

16 characters are available for assigning a header title (usually the company name). The header text will be shown on every printout.

10.7 Customer ID > ()

In case your recorder has an iGPRS interface incorporated and you have subscribed to EuroWeb, you will only be able to view your recorder and data on EuroWeb after you have entered the 8 number customer ID.

10.8 Pin number > 1111 (default pin code)

The pin code is intended to prevent unauthorized people access to the parameter menu. Select a code between 1111 and 7777 (7 = highest possible number, digit „0“ is not available).

Please note: Do not forget to write down the new pin code and store it in a safe place. There is no master code available to get later access to the parameter menu.

10.9 Correct. factor > Recommended: XX / Setting: +/-X

As the analogue temperature reading is converted into a digital display, using the AD convertor, a small error can occur, which can be corrected via this setting (not available via normal Pincode)

10.10 Serial number > 12400005

Displays the serial number of the recorder. The number will be set at factory and cannot be changed. The serial number will be on every printout.

Menu 11 Communication settings

Define which (communication) devices are internally or externally connected to the unit.

11.1 COM 1 (external COM port on CON2)

The following options are available:

> No protocol
> Old ES protocol
> TMS protocol 9k6
> TMS protocol 38k4
> Bluetooth protocol *
> Fridge switch protocol
> Mitsubishi fridge
> Thermo King fridge
> External sensor **

*** Bluetooth protocol**

Bluetooth PIN **> PIN code**

This is a 16 digit numerical PIN code for identification at the Bluetooth base station.

BT base **> base station address**

This is the hexadecimal address of the Bluetooth base station [xx : xx : xx : xx : xx : xx]

BT discon time **> sample rate, 5, 10 15 min. ... 60 hours**

This is the time that the Bluetooth module is inactive. In case “Sample rate” has been set, the module will be switched on synchronous to the sample rate interval time.

BT PDA scan **> Yes/No**

In case this option has been selected, the recorder will connect to your PDA at “BT discon interval” times. The PIN code for your PDA should be the same as the BlueGiga base station PIN code.

**** External sensor**

Receiver mode **> Polling / Non polling**

Data from remote (temperature/humidity/universal/current) sensors will be logged.

Polling **> 1..255 sec.**

At the selected interval time, data from the remote sensor(s) is logged. (recorder ‘asks’)

Non polling

The remote sensor transmits data to the recorder on its own intervals.

Transmit mode

Data from the connected sensors and digital inputs on the recorder will be sent to another device.

11.2	**COM 2**	(external COM port on CON2)	similar to **COM1**
11.3	**COM 3**		reserved for future applications
11.4	**COM 4**	(internal COM port)	**> No protocol** **> DECT protocol and submenus** **> iGPRS and GPS protocol and submenus**

Attachment A Technical data

For technical support please contact your supplier or visit **www.euroscangroup.com**
Technical specification:

- Operating voltage: 10..36 V, protected against alternator load shedding
- Power consumption: nominal value 0,6 W, max. 25 W (while printing)
- Temperature: -30 °C / +70 °C (in operation), -40 °C / +85 °C (maximum)
- Humidity: 97% relative humidity at 25 °C
- Memory size: 512 kB, minimum 1 year with 2 sensors and logging interval 15 min.
- Inputs:
  - 6 x temperatures for Euroscan sensors: measuring range -40 °C to +50 °C
  - 1 x digital for display background light, active > 5 V
  - 4 x digital, closed circuit
- Outputs:
  - 1 x open output, switched to ground and current limited to 1 A
- Data ports:
  - Infra red for data transmission and service/parameter programming
  - 2 RS232 connectors for external devices
  - 2 RS232 for internal devices on one connector
  - 1 CAN bus connector. (optional)

a) Ventilation:
No special requirements. Euroscan recorders are designed for use in an automotive environment.

b) IP rating:
Euroscan TX2-6, trailer version for outside mounting, IP65
Euroscan RX2-6, cabin version for cabin mounting, IP22

c) Dimensions (W x H x D):
Euroscan TX2-6, 245 x 202 x 110 mm
Euroscan RX2-6, 188 x 58 x 145 mm

d) Maintenance:
Clean with a moistened duster, without alcohol or other volatile cleaning products.

e) Circuit protection:
For protection a 10A floating fuse must be fitted in the positive (+VE) power line as close as possible to the power connection (contained in installation kit).

f) Battery:
Unit contains a lithium battery, please remove before discarding and dispose of separately.

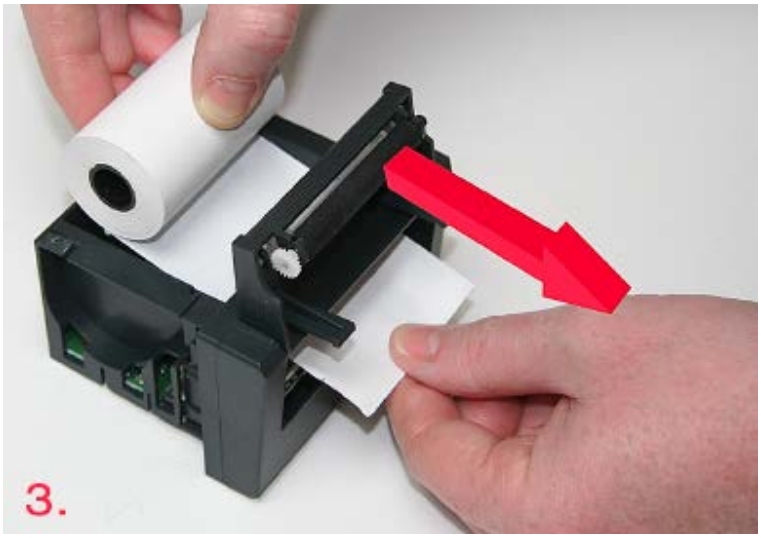
Attachment B Replace paper roll

A coloured line appears on the last metre of paper and indicates that the paper roll needs to be replaced.
To change a paper roll, please proceed as follows:

Pull down the transparent plastic lever and pull out the printer towards you (in the direction of the arrow). Fig.2

Remove empty roll.

- Put the new paper roll into the printer and make sure that the paper is fed in the correct way.
- After changing the paper please install the printer with the flap open and close the flap only after the printer is fully inserted.



Attachment C Error codes

If the display shows one of the following values:

OC (I) the input is activated but no sensor is connected
(ii) the sensor has an open circuit (sensor or wire failure)
SC (I) the sensor has a short circuit (sensor or cable failure)

Attachment D Factory settings

5 Temperature inputs

5.1 T1 input.....On
5.1.1 Type .....Temperature
Name.....Return air
5.2 T2 Input .....On
5.1.2 Type .....Temperature
Name.....Rear
5.3 T3 Input .....Off
5.4 T4 Input .....Off
5.5 T5 Input .....Off
5.6 T6 Input .....Off

6 Digital inputs

6.1 D1 input .....Off
6.2 D2 input .....Off
6.3 D3 input .....Off
6.4 D4 input .....Off

7 Compartment settings

7.1 Compartment 1.....On
7.1.1 Compartment name Compartment. 1
7.1.2 .....Print T1 Yes
7.1.3 Alarm on T1.....On
Store position when alarm active:
No
Store position when alarm inactive:
No
7.1.4 .....Print T2 Yes
7.1.5 .....Alarm on T2 On
Store position when alarm active:
No
Store position when alarm inactive:
No
7.1.6 .....Print T3 No
7.1.7 .....Alarm on T3 Off
7.1.8 .....Print T4 No
7.1.9 .....Alarm on T4 Off
7.1.10.....Print T5 No
7.1.11.....Alarm on T5 Off
7.1.12.....Print T6 No
7.1.13.....Alarm on T6 Off
Store position on comp. alarm:
No
7.1.14.....Print D1 No
7.1.15.....Print D2 No
7.1.16.....Print D3 No
7.1.17.....Print D4 No
7.2 Compartment 2.....Off
7.3 Compartment 3.....Off
7.4 Compartment 4.....Off

8 Alarm settings

8.1 Alarm group 1 .....Off
8.2 Alarm group 2 .....Off
8.3 Alarm group 3 .....Off
8.4 Alarm group 4 .....Off
Alarm behind PIN:.....No
Output function .....Alarm

9 Printer settings

9.1 Graph upper limit .....-15 °C
9.2 Graph lower limit.....-30 °C
9.3 Graph mm. per h.....5 mm
9.4 User menu .....Yes
9.5 Delivery ticket setting .....Actual only
9.6 Events ticket setting.....Print all
9.7 Print time period.....10 hour(s)
9.8 Day start time.....00:00
9.9 Day end time.....18:00

10 General settings

10.1 .....Temp. unit °C
10.2 .....Date format dd/mm/yyyy
10.3 .....Sample rate 10 min.
10.4 .....Vehicle ID Serial number followed by X26
10.5 .....Header Abcdef
10.6 .....Customer ID
10.7 .....Pin code 1111
10.8 .....Correct. factor + X
10.9 .....Serial number xxxxxxxx

11 Communication settings

11.1 .....COM 1
11.2 .....COM 2
11.3 .....COM 3
11.4 .....COM 4

We ensure Quality

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